

# Mohave County Miner.

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## Now Australian Cyanide Process.

The recently patented Nicholson apparatus for the filtration of solutions from ores is thus described in a recent issue of the Queensland Government Mining Journal:

The slimes are first tipped into a patent agitator with 50 per cent of slimes, assaying gold, and 50 per cent of water, with sufficient cyanide salt dissolved in the water. The whole is then sufficiently agitated until the gold in the slimes is dissolved. In order to prove this, the solution is assayed in the ordinary way. The slimes, then in the form of a cream, are passed from the agitator into the Nicholson apparatus. It goes into the receiver, which is revolving at high speed inside a narrow vessel. The outer vessel travels at a higher speed, and in an opposite direction. The vessel has an enclosed chamber, which contains sand and lime in proportion. On the outside of the wall canvas and such like is fixed. The receiver, while revolving steadily, rises to 3 in. from the top, and as it comes down it forces the slimes on the inside of the surface of canvas. The outer vessel travels at a high speed and by the time the receiver reaches the bottom the cyanide solution is forced by pressure through a filter, and runs into a circular launder at the bottom for treatment known as zinc shavings. There is a screw on the outside of the receiver, and to this screw movable shovels are fixed by means of springs. As the receiver rises the shovels get caught into the slimes, which are carried out of the vessel at the top into a launder for their reception. A brush surrounds the screw, and above the brush are jets of water. The jets play on the canvas and keep it clean, and at the same time the brush cleans the canvas, and carries everything collected to the top. The apparatus has been constructed in such a manner as to deal successfully with poor slimes that will not pay under present circumstances. A plant to treat 1,000 tons of slimes per week is estimated to cost about 600£, while the cost of treatment is placed at about 1s. per ton, and it is claimed that slimes going 12 gr. to the ton would yield a profit. Leading mining men in Adelaide have taken the matter in hand, with a view to forming a syndicate for treating slimes by the new process.

## Remarkable Ore Ledges on an Old Volcano.

Messrs. Ernest and Carlton Foster, president and secretary of the Pacific Reduction company, have just returned from San Bernardino county, where they affected the consolidation of several important mining properties in the Shadow mountains, twelve miles east of Silver Lake. The consolidation represents 440 acres of mineralized territory, which comprises twenty-two claims. These claims include a series of craters of an extinct volcano which present evidences of heavily mineralization. Traversing the claims are a series of mineralized dykes which form fissures radiating from the volcanic center. The entire crater is highly mineralized and these dykes, which are of immense width, form the ore shoots from which the new owners expect to extract their values. Some of the claims secured by the Messrs. Foster were owned by Gus Williams and were formerly well known as the Winter's property. Considerable development work is in evidence on the property and a large amount of high grade ore has already been uncovered. On one claim is a 250-foot tunnel, while on the whole property are five shafts, each over 100 feet in depth, and ten shafts over fifty feet deep, as well as cross cuts and drifts which expose the nature and character of the ore body. From these workings the ore was shipped to the Salt Lake and San Francisco smelters and netted over 50¢ per ton in gold and lead. In one of the shafts is a nine-foot ledge of ore which averages over 100¢ a ton in gold and lead. On another claim is exposed a 14-inch ledge averaging over 420¢ per ton in gold. On still another claim is a four-foot body of ore which averages 80¢ per ton, as shown by the smelter receipts.

It is the intention of the new owners to put a crew of men to work within thirty days and heavy machinery will be immediately installed for the most active prosecution of the work. H. Amos Perkins, vice president of the company, and formerly of Searchlight, Nev., will have full charge of the mining operations. Three shafts will be sunk to the 500-foot level and work on these will be well under way by January 1. The property is known as the Shadow Mountain mine from which an excellent wagon road leads to Silver Lake on the Tonopah and Tidewater railroad. It is expected by the time the new smelter at Crucero is ready for business that ore from this mine will be on the smelter dump.—Los Angeles Tri-State Miner.

## Six-Day System is Adopted by the Old Dominion.

Beginning this morning the Old Dominion company will inaugurate its new six-day labor system in its mines, the graveyard shift coming off this morning not being relieved by the usual day shift. The new policy of the company will not affect the smelters, except that for the time being and until the copper metal situation becomes more settled, but three furnaces will be operated. This forms the only method of retrenchment to meet the present overproduction of copper that will be adopted by the Old Dominion company and it follows the recent visit here of Dr. James Douglas, president of the Phelps Dodge company. According to the most reliable authority, there will be no further curtailment and no more men will be laid off by the company.

It is very likely that the six-day system will be adopted by the other large mining companies in the district, with the possible exception of the Gibson Copper company, although the new order at the Old Dominion was issued too late yesterday to allow of its promulgation by the other companies. The adoption of this policy by the chief mining company of the Globe district, rather than one which would be accompanied by the cutting down of the present scale of wages, is on the whole a very acceptable one to both the wageworkers of the district and the business interests of the city, owing to the fact that so many conflicting rumors relative to the probable policy of the company had become current, causing much unrest among all classes in the district. A settled line of action will bring new confidence, although at no time has there been actual fear that local conditions would become very serious. As it is, Globe is in far better condition and has far better prospects for the winter season than any copper mining camp in the country, with the possible exception of the mining towns in the Lake country, where there has been little or no curtailment in the production of the red metal.

The Old Dominion smelter made its record run last Sunday, when 770 bars of blister copper were turned out.—Silver Belt.

## Important Mine Sale.

Wednesday afternoon a number of the stock holders of the Gallup Fuel company and the Union Coal company met at the office of the secretary of those companies, B. F. Zahm, and consummated a deal whereby a number of prominent Albuquerque citizens became the owners of the mine commonly known here as the Union mine. From what could be learned it is the intention of the buyers to take possession of the property next week and begin active operations at once. A big force of men will be put to work, many needed improvements will be made, and it is now expected that an office will be opened in town.

The Albuquerque people who have bought the property have a retail yard in their home town and will market their coal directly to the consumers. They expect to begin with a production of 100 tons per day and increase this output as rapidly as possible.

The Union mine is known to be a good property, as according to people who understand coal mining it lies in

a very favorable situation, and prospecting work on and nearby the mine has shown that there is an enormous body of high grade coal within the limits of the holdings. The Albuquerque people have made a good buy and while they will undoubtedly be successful in a financial way in their purchase they will also be a great help to Gallup as many men will be employed on the property who will live in or near town.—Gallup Republican.

## Copper Slump Hits Cananea Hard.

News from an authoritative source reached Tucson today to the effect that yesterday at Cananea the Greene-Cananea Co. laid off 550 more men than in addition the company will henceforth not operate its night shift for some time. This information means that instead of having a force of 3,000 men at work in the mines and in the smelter and reduction plants, the number of workmen will be less than 1000. News of the partial shut-down of the Cananea plant had been predicted, but it was hardly expected that it would come so sudden.

The company had for some time past been operating only five of its eight furnaces at the smelter, and now this number will be lowered to two furnaces. It is not believed that there will be a complete shut-down of the company's plant, as there is a clause in the concession of the company from the Mexican government which requires that a certain amount of work be done daily on the property.

Cananea is without question the largest mining camp in the Southwest. Instead of having, as Bisbee, one very large mine, like the Copper Queen, the town boasts of several mines of great magnitude. It claims a population of 30,000 people and the mines are scattered for 14 miles up the canyon, being connected by a narrow gauge road.—Tucson Citizen.

## Twin Butte Mines Closed.

Following instructions contained in a telegram from Milwaukee received yesterday afternoon at Twin Buttes camp from President D. S. Rose of the Twin Buttes Company, Supt. Wm. McDermott last night discontinued operations on the property.

"It is true that orders were received to shut down the plant but they came as a great surprise to me," he said today over the telephone, "we were getting matters at the mine in good shape and had made several good strikes and I had not the least idea that work would be suspended. The order instructing us to close came from President Rose of the company and I presume that he was following out the orders of the directors given at a special meeting held in Milwaukee."

The suspension of work at the camp will come as a great surprise to local people who own a considerable portion of the stock of the company. There is little doubt, however, but that the tightness of the money market at present, combined with the decline in the price of copper, were the chief reasons for the closing order. With copper low it is possible to ship only high grade ore to the smelter to secure a good profit. The Twin Buttes has uncovered a number of excellent ore bodies but no effort has been made for some time past to ship ore as it was desired to proceed as rapidly as possible with the development work.

The company has had a force of only about 60 men at work for some months past, but it had been supposed that this number would be considerably increased within a short time. It is hardly probable that the mines will be closed down for any considerable length of time.

Preceding the closing down of the Twin Buttes mine was the order doing away with the daily train service on the railroad. Henceforth there will be but two trains per week and these will run Tuesday and Saturday. On the other days a motor car which can carry several passengers will be used to make the trip to the camp and return.—Tucson Citizen.

## Work Continued on Old Dominion.

When all other larger mines in the country are retrenching by cutting

off production and partially or wholly suspending development work, the Old Dominion company, the leading company of the Globe district, is resuming development operations which had been temporarily suspended and beginning new exploratory work. Work which was discontinued in B. shaft several weeks ago was Friday morning resumed. On the 10th level drifting into Buffalo hill was again taken up, as was work on the drift on the 12th level toward A shaft to make connection for better ventilation with the mine. At C shaft sinking was also resumed Friday at the eighth level, which will be sunk to the tenth level. Two drifts had been run from A shaft into C shaft territory with the intention of starting up upraises, but this idea was abandoned because of the heaviness of the ground. All of the ground above the ninth level has now been drained and the ground below the ninth is now being drained through the drift on the tenth to A shaft, the water being hoisted through the latter shaft. The ground is now comparatively free from water and sinking may be resumed, with good results.

The winze from the fourteenth level to the sixteenth, which has attracted widespread attention among mining men, has been completed and the lowest workings of the mine are 1,235 feet deep. The station on the sixteenth is being cut and already about sixteen feet of the work has been done. As soon as completed, crosscutting will begin to reach the big sulphide veins, the discovery of which on the fourteenth level aroused interest throughout the copper mining world. It is estimated that sulphide vein No. 1 will be reached with eighty or one hundred feet of crosscutting and if the estimate is correct, the vein should be encountered by the middle of November. It is confidently expected that the work on the new low level of the Old Dominion mine will show that it is one of the richest high grade copper mines, if not the richest, in the world.—Silver Belt.

## United Verde Will Not Shut Down.

In a talk with a News representative yesterday morning, Assistant Gen. Manager Will L. Clark of the United Verde Copper Company, said that there was nothing in the rumor that his company contemplated closing down the mine or smelter, but that, with all the other producing mines in the country, they were reducing their output 50 per cent. That a great deal of the construction work which they have been doing this summer is now finished and others nearing completion, hence the services of a great many of their men are being dispensed with, but that construction work now under way will be continued. The curtailing of the production has, of course, necessitated the laying off of a number of miners and other underground men, and some of the service men who handled their production, but that the works would continue to be run along as they are at present.—Jerome News.

## Rich Strike in Sonora.

Reports received from C. J. Eames, Jr., superintendent of the San Antonio mine in Sonora, owned by the Boston-Mexican Mines company, state that the rich vein of silver ore recently discovered in tunnel number one, has increased from eight feet to eleven feet in width on the footwall, and that a good sized body of rich ore in the form of black sulphide of silver has been uncovered on the hanging wall, which averages over 1500 ounces of silver to the ton. Ore running 800 ounces to the ton is now being sacked for shipment.—Chihuahua Enterprise.

## Humboldt Smelter is Shut Down.

Prescott, Oct. 25.—At midnight tonight the Humboldt smelter, Tom Lawson's property, ceased operations on telegraphic instructions from Boston. All of Lawson's producing mines in this county have been closed. Inability to raise funds with which to keep the plant in operation is given as the cause of the shut down.

## Kelvin is Humorous.

Last week Friday the Ray mill closed down throwing many men out of employment. The Republican says the people took the closing down of the camp good naturedly.

All the stores in Kelvin are decorated with grotesque and humorous signs and as if to bluff despondency by her own weapons, some of the stores and other buildings are decorated with crepe. Among the many signs displayed are the following: On a telegraph pole in the center of the camp is a sign saying: "Ray is dead, advise disposition of remains." Hennes & Griffin's store has the whole front draped in crepe and two signs, one saying, "Kelvin is not dead, only sleeping"; the other says, "Kelvin was a good old camp but she fell down." On the Pinal Mercantile Co.'s store a sign reads, "Must sell quick." The Hercules Mercantile Co. has a sign reading, "Not dead but dying." Even the lone Chinaman who runs the restaurant has a sign saying, "Me Sallee Cheap." The Southern hotel is decorated in crepe and a large sign in front reads, "A good paying hotel for sale cheap." Jake Bates' livery stable bears a large sign saying, "For sale cheap," and a saloon has a sign "It pays to advertise." Everybody is making fun of the situation and refuses to feel blue.

## Developments in Bigbug.

O. B. Marshall has returned from his mining claims in the Bigbug district, where he has been at work for the past ten weeks. His claims are located between the Lelan and New England Gold and Copper groups. He says he has his shaft, which is 8x4 1-2 feet, down 24 feet. That there is four and one-half feet of ore, with no hanging wall in sight. He has assays from the ore which show values of 25.60¢ per ton. As he was sinking the shaft, a streak of hematite of iron, about the thickness of a knife-blade appeared. This sampled richly in free gold, in five feet the streak had widened to eight inches, still holding its richness, and is widening at the rate of two inches for every foot sunk. Mr. Marshall feels sure that he has a remarkably fine property and says the formation is identical with that of the Gold Roads mine in Mohave county. He is making ready to ship a carload of ore.—Prescott Courier.

## Chemistry and Progress.

Dr. Arthur D. Little, addressing the American Chemical society recently, mentioned some interesting instances of the immense contributions of chemistry to the work and wealth of the world. The steel industry, he said, is today at every point under the strictest chemical control. Abram S. Hewitt estimated that the bessemer process alone added, directly and indirectly 2,000,000¢ yearly to the world's wealth. Chemical processes of making madder and indigo colors have changed the face of those industries. One-half of the entire consumption of indigo is now produced in German chemical plants. Ultramarine is now furnished by chemistry at half price of copper, whereas in the form of lapis lazuli in the days of Liebig, it was dearer than gold.—Youth's Companion.

A very interesting supplement of "El Tiempo," published at Cananea, Sonora, Mexico, by Simon Montano, has been received in Nogales. "El Tiempo" notifies the inhabitants of the great copper camp that all operations in Cananea district controlled by the Cananea Consolidated Copper Company, will in the very near future be suspended until the copper situation can be adjusted. "All workmen are warned to prepare for the crisis by seeking employment at Cerro Prieto, on the new railroad building between Del Rio and Nogales, and elsewhere." Soldiers have been rushed to Cananea to prevent trouble following the suspension of operations, which will throw several thousand workmen out of employment. The warning of "El Tiempo" is most timely and should be the means of preventing much suffering in the great copper camp.—Border Vidette.